GOVERNMENT OF THE DISTRICT OF COLUMBIA DEPARTMENT OF HEALTH

ADVISORY

TO RESIDENTS AND VISITORS
OF THE DISTRICT OF COLUMBIA

QUESTIONS AND ANSWERS ABOUT ANTHRAX



Government of the District of Columbia Anthony A. Williams, Mayor

Questions and Answers About Anthrax

1) What exactly is anthrax?

Anthrax is an acute infectious disease caused by spore-forming bacteria found most commonly in hoofed animals--ranging from cattle to sheep to camels. It occurs in humans when they are exposed to infected animals, tissue from infected animals, or when they are directly exposed to the bacteria that causes anthrax (Bacillus anthracis). Of course what we are seeing lately, and the reason anthrax is suddenly in the news, is that there have been several cases of intentional exposure to a powdered form of anthrax being sent through the mail. Depending on the mode of exposure, anthrax in humans occurs in three forms: cutaneous or through the skin; gastrointestinal if it is ingested in contaminated food; or inhalation, if the spores are directly inhaled. Anthrax is not spread from person to person.

2) What are the symptoms of exposure to anthrax?

Symptoms of anthrax usually develop within 7 days of exposure depending on how the disease was contracted, with most cases occurring within 48 hours of exposure. Incubation periods up to 60 days are possible. Anthrax can be spread three ways: (1) through breathing in (inhalation) anthrax spores; (2) through cutaneous (skin) which occurs when the anthrax enters a small cut or abrasion on the skin; or (3) through ingesting contaminated, undercooked meat.

Initial symptoms of inhalation anthrax may resemble the common cold. After several days, the symptoms may progress to severe breathing difficulties and shock. After the onset of symptoms, inhalation anthrax is often fatal. However, early antibiotic treatment of the disease before the onset of symptoms greatly reduces the chances of developing disease. Cutaneous (skin) anthrax is marked by a boil-like lesion that appears and eventually forms an ulcer with a black center, while initial symptoms of intestinal anthrax include: nausea, loss of appetite, vomiting, and fever, followed several days later by abdominal pain, vomiting of blood, and severe diarrhea.

In the event of a bioterrorist attack with anthrax, a rapid investigation would be conducted to determine the time and place of the release, and to identify persons who were exposed and who are in need of antibiotics to prevent illness.

3) Should the District of Columbia residents stockpile antibiotics to protect themselves against bioterrorism?

The District of Columbia Department of Health strongly recommends against stockpiling antibiotics, as the use of antibiotics in the absence of evidence that indicates a confirmed exposure is not without risk. Inappropriate use of antibiotics may cause the development of antibiotic-resistant strains of common bacterial diseases. In addition, using antibiotics may cause serious adverse reactions including: diarrhea, abdominal symptoms, rash, allergic reactions, and potentially dangerous interference with other medications. Individuals who stockpile antibiotics would also be more likely to use expired medications. Additionally, stockpiling could lead to shortages of national supplies for routine and emergency use. A large stockpile of pharmaceuticals---including antibiotics that are effective against the most likely bacterial bioterrorist agents---has been amassed by the federal government and would be rapidly available for distribution in the event of a bioterrorist attack

4) Is there a vaccine for anthrax?

There is an animal vaccine that has protected our livestock from the disease for many years. In fact, it is the principal veterinary vaccine in the Western Hemisphere.

An effective human vaccine for anthrax was first developed in 1954, according to the Centers for Disease Control and Prevention, and it was improved between 1957-60. Primary vaccination consists of three subcutaneous injections at 0, 2, and 4 weeks, with three booster shots at 6, 12 and 18 months followed by annual boosters. Studies are underway to determine if this is indeed the best course of treatment

and whether intra-muscular injections will be equally, or more effective than subcutaneous injections.

There are limited supplies of a human vaccine for anthrax, which is primarily reserved for those who might have first exposure, such as military personnel and hospital and public safety workers. There is still research underway with the intent of producing an effective vaccine available to the general populace.

5) What should I do if I believe another person, or I have been exposed to anthrax?

The first step is to try to prevent exposure. The recent cases have come through letters in the mail. Examine any envelope carefully before opening it, make sure it has a return address and that the address matches the postmark.

If you take these precautions, and a suspicious powder spills out once you open the envelope, remain calm. Leave the letter where you find it. Call 9-1-1 if you believe you have been exposed and tell them your suspicions so they will come properly prepared for a potential biohazard. If you believe another person has been exposed, you will have to resist the human urge to rush to that person, and keep at a safe distance. Again, call 9-1-1 and tell them your suspicions. While person-to-person spread is unlikely, you do not want to risk exposure to the same hazard that may have endangered your family member, friend or co-worker.

For more information, call the DOH Emergency Call Center at (202) 442-9196.



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